CURRICULUM VITAE

Betül Gezer

Address : Uludag University, Faculty of Science,
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Education :

Ph.D. in Mathematics, University of Uludağ, 2009
Thesis: Singular Curves and Elliptic Divisibility Sequences, Advisor: Prof. Dr. Osman Bizim

M.S. in Mathematics, University of Uludağ, 2005
Thesis: Discontinuous Groups and Fundamental Regions, Advisor: Prof. Dr. Osman Bizim

B.S. in Mathematics, University of Uludağ, 2003.

Academic Employment :

Associate Professor, Department of Mathematics, University of Uludağ, 2015 – present.

Assistant Professor, Department of Mathematics, University of Uludağ, 2013 – 2015.

Lecturer, Department of Mathematics, University of Uludağ, 2009 – 2013.

Lecturer, Junior Technical College of Yalova, University of Uludağ, 2006 – 2008.

Fellowships :

TÜBİTAK (The Scientific and Technological Research Council of Turkey), Research Fellowship Project No. 107 T 311, "Modular Forms, Elliptic Curves and Applications", 2007 – 2009.

Research Areas:

1. Discontinuous and Discrete groups,

2. Elliptic Functions,

3. Number Theory, Algebraic Number Theory,

4. Modular Forms,

5. Elliptic curves,

6. Bilinear sequences, Elliptic divisibility sequences, Somos sequences,

7. Cryptography.

Other Academic Activities :

Workshop on Mathematical Methods in Applied Sciences, May 22-23, 2008, organizer.
Reviewer for *Mathematical Reviews*, 2010-

PUBLICATIONS

A. <u>Articles:</u>

A 1. **Gezer, B.**, Özden, H., Tekcan, A. and Bizim, O., " *The Number of Rational Points on Elliptic Curves $y^2 = x^3 + b^2$ Over Finite Fields* ", International Journal of Mathematics Sciences, **1**, 178-184, (2007).

A 2. Tekcan, A., **Gezer, B.** and Bizim, O., "*On the Integer Solution of the Pell Equation $x^2 − dy^2 = 2^t$*", International Journal of Mathematics Sciences, **1**, 204-208, (2007).

A 3. Tekcan, A., **Gezer, B.** and Bizim, O.,"*Some Relations on Lucas Numbers and Their Sums*", Advanced Studies in Contemporary Mathematics, **15**, 195-211, (2007).

A 4. Gezer, B., Tekcan, A. and Bizim, O., "*The Number of Rational Points on Elliptic Curves and Circles Over Finite Fields*", International Journal of Mathematics Sciences, **2,** (2) 58-63, 2008.

A 5. Tekcan, A., Özkoç, A., **Gezer, B.** and Bizim, O.,"*Some Relation Involving the Sums of Fibonacci Numbers*", Proceeding of the Jangjeon Mathematical Society, **11**, (1) 1-12, 2008.

A 6. Tekcan, A., Özkoç, A., **Gezer, B.** and Bizim, O.,"*Elliptic Curves and Cubic Congruences Associated with Indefinite Binary Quadratic Forms*", Novi Sadjournal of Mathematics, 38, 2, 71-81, 2008.

A 7. Gezer, B. and Bizim, O., "*Elliptic Divisibility Sequences in Certain Ranks Over Finite Fields*", Hacettepe Journal of Mathematics and Istatistics, **38**, 2, 161-171 (2009).

A 8. Gezer, B., Tekcan, A. and Bizim, O., "*Elliptic Divisibility Sequences Over Finite Fields*", International Journal of Mathematics Sciences, **4,** (1) 12-19, 2010.

A 9. Gezer, B. and Bizim, O., "*Squares in Elliptic Divisibility Sequences*", Acta Arithmetica, 144, 2, 125-134, 2010.

A 10. Tekcan, A., Özkoç, A., **Gezer, B.** and Bizim, O., "*Representations of Positive Integers by Quadratic Forms*", The Southeast Asian Bulletin of Mathematics, 35 (1), 137–148, 2011.

A 11. Gezer, B. and Bizim, O., "*Cubes in Elliptic Divisibility Sequences*", Mathematical Reports, 14 (64), 2, 21-29, 2012.

A 12. Gezer, B., "*Elliptic Divisibility Sequences, Squares and Cubes*", Publicationes Mathematicae Debrecen, 83(3), 481-515, 2013.

B. Books :

B 1. Bizim, O., Tekcan A., **Gezer, B.**, *Genel Matematik I*, Dora yayınları, Bursa, 2014 (4th edition).

B 2. Bizim, O., Tekcan A., **Gezer, B.**, *Genel Matematik II*, Dora yayınları, Bursa, 2014 (3rd edition).

B 3. Bizim, O., Tekcan A., **Gezer, B.**, *Genel Matematik, Diferensiyel ve İntegral Hesap*, Dora yayınları, Bursa, 2011.

SYMPOSIUM ATTENDED

C. International :

C 1. Gezer, B., Tekcan, A. and Bizim, O., **"*On the Singular Elliptic Curves Over Finite Fields*"**, Antalya Algebra Days IX, Antalya, 2007, Türkiye.

C 2. Tekcan, A., **Gezer, B.** and Bizim, O., **"*The Connection Between Principal Indefinite Quadratic Forms and Elliptic Curves*"**, Antalya Algebra Days IX, Antalya, 2007, Türkiye.

C 3. Gezer, B., Bizim, O. and Tekcan, A., **"*Some Properties of the Elliptic Divisibility Sequences over Finite Fields*"**, Workshop on Mathematical Methods in Applied Sciences, Bursa, 2008, Türkiye.

C 4. Tekcan, A., **Gezer, B.** and Bizim, O., **"*Right Neighbors and Base Points of Indefinite Binary Quadratic Forms*"**, Workshop on Mathematical Methods in Applied Sciences, Bursa, 2008, Türkiye.

C 5. Gezer, B. and Bizim, O., **"*Elliptic Divisibility Sequences in Certain Ranks over Finite Fields*"**, Antalya Algebra Days X, Antalya, 2008, Türkiye.

C 6. Bizim, O., **Gezer, B.**, Özkoç, A. and Tekcan, A., **"*The Relationship Among Elliptic Divisibility Sequences, Elliptic Curves and Binary Quadratic Forms*"**, Antalya Algebra Days X, Antalya, 2008, Türkiye.

C 7. Gezer, B., Bizim, O. and Tekcan, A., *"On the Elliptic Divisibility Sequences Over Finite Fields"*, 5th European Congress of Mathematics, July 14-18, 2008, Amsterdam RAI, The Netherlands.

C 8. Gezer, B. and Bizim, O., **"*Squares and Cubes in Elliptic Divisibility Sequences*"**, Antalya Algebra Days XII, Antalya, 2010, Türkiye.

C 9. Gezer, B. and Bizim, O., **"*Sequences Associated to Elliptic Curves*"**, An International Conference on Number Theory and Its Applications, Debrecen, 2010, Hungary.

C 10. Gezer, B. and Bizim, O., **"*Elliptic Divisibility Sequences Associated to Elliptic Curves*"**, Antalya Algebra Days XIII, Antalya, 2011, Türkiye.

C 11. Gezer, B. and Bizim, O., **"*Somos Sequences and Their Integrality Properties*"**, Antalya Algebra Days XV, Şirince, İzmir, 2013, Türkiye.

C 12. Gezer, B. and Bizim, O., **"*A Family of Integer Somos Sequences*"**, Open Problems in Mathematical and Computational Sciences, İstanbul, 2013, Türkiye.

D. National :

D 1. Gezer, B., Bizim, O., *"Eliptik Bölünebilir Dizilerdeki Kareler"* XXI. Ulusal Matematik Sempozyumu, 2008, Koç Üniversitesi, İstanbul.

D 2. Gezer, B., Bizim, O., **"Sıfır Terimli Eliptik Bölünebilir Diziler"** XXII. Ulusal Matematik Sempozyumu, 2009, Matematik Köyü Şirince, İzmir.

TEACHING

Undergraduate: Introduction to Algebra, Introduction to Elliptic Curves, Algebraic Number Theory, Analysis, Calculus, Basic Mathematics, General Mathematics, Advanced Mathematics.

Graduate: Algebra, Field Theory, Ring Theory, Number Theory, Algebraic Number Theory, Elliptic Curve Theory.